



GUIDE

**To the National Emissions Standard for
Hazardous Air Pollutants (NESHAP)**

MISCELLANEOUS SURFACE COATING OPERATIONS AT AREA SOURCES

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TABLE OF CONTENTS

WHY THIS RULE IS NEEDED	4
WHO IS INCLUDED	5
WHO IS EXEMPTED	5
WHAT IS EXEMPTED	6
Exempted Sources	6
Exempted applications	6
Facility Maintenance	7
REQUIREMENTS	8
Spray Applied Coatings	8
Compliance Dates	8
Recordkeeping	10
AIR CONSTRUCTION PERMITS	11
FORMS	12
Initial Notification/Notification of Compliance Status	12
DNR form for Permit by Rule for Spray Booths (placeholder)	14

WHY THIS RULE IS NEEDED

The U.S. Environmental Protection Agency (EPA) and the Iowa Department of Natural Resources (DNR) are required by law to reduce exposure to hazardous air pollutants (HAPs). HAPs are known or suspected to cause cancer or other serious health effects such as birth defects. Coatings used in automobile and mobile equipment refinishing contain HAP and therefore may pose a risk to public health in the vicinity of the operations, especially in urban areas.

Area Sources. An “Area Source” is defined as a facility that emits or has the potential to emit less than 10 tons of any single HAP and less than 25 tons of any combination of HAPs per year.

Source Categories. Types of operations identified by EPA as needing regulation are referred to as “source categories.” There are 70 area source categories that EPA has identified as needing regulation. Three of these are included in the *Miscellaneous Surface Coating Operations – National Emission Standards for Hazardous Air Pollutants (NESHAP) Area Source* regulations [40 Code of Federal Regulations (CFR) Part 63, subpart HHHHHH]

- (1) Paint stripping operations that use methylene chloride (MeCl) to remove dried paint from wood, plastic, metal or other substrates. **NOTE:** This source category is **not** covered in this guide. A separate Fact Sheet summarizing the paint stripping regulations is available.
- (2) Motor vehicle and mobile equipment spray-applied surface coating operations
- (3) Miscellaneous surface coating using spray application of coatings containing compounds of chromium (Cr); lead (Pb), manganese (Mn), Nickel (Ni) and Cadmium (Cd).

The next few pages explain how these requirements will help control health risks in the source category facilities and air quality in the community.

WHO IS INCLUDED

The Miscellaneous Surface Coating Operations – Area Source NESHAP regulations apply to the following:

- ☑ Operations that apply surface coatings to motor vehicles and/or roadway use equipment
- ☑ Operations that spray liquid coatings on plastic and/or metal substrates (underlying layer) which contain **Target Hazardous Air Pollutants (HAPs)**

For this rule, the Target HAPs are **coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni) and cadmium (Cd)**. Additionally, the coatings are considered to contain Target HAPS if:

- ☑ The coating contains any individual Target HAP that is an OSHA-defined carcinogen and the concentration exceeds 0.1 percent by mass and/or
- ☑ The coating contains any individual Target HAP that is not an OSHA-defined carcinogen (as of 01/08/08 only manganese is in this category) and the concentration exceeds 1.0 percent by mass.

The information on the concentration of a Target HAP in a coating material can be found on the most recent Material Safety Data Sheet (MSDS) or by contacting the coating material manufacturer.

WHO IS EXEMPTED

- Motor vehicle and mobile equipment surface coating operations may petition for exemption if they demonstrate that Target HAPS are not contained in the coatings sprayed by the facility. An exemption petition form is included in this guide and is also available for download at www.iowacleanair.com/prof/NESHAP.
- Miscellaneous surface coating operations that spray liquid coatings on plastic and/or metal substrates which do not contain Target HAPS are automatically exempt. No reporting is required.

WHAT IS EXEMPTED

Exempted Sources

- ☑ Surface coating performed on site at installations owned or operated by the U.S. Armed Forces, NASA or the National Nuclear Security Administration.
- ☑ Surface coating of military munitions, as defined in §63.11180, manufactured by or for the US Armed Forces or equipment directly and exclusively used for the purposes of transporting military munitions.
- ☑ Coating performed by an individual on personal vehicles, possessions, or property, either for hobby/maintenance, provided that no more than two motor vehicles or pieces of mobile equipment are coated per year. This exemption also applies when these operations are performed by individuals for others without compensation.
- ☑ Surface coating that meets the definition of “research and laboratory activities” in §63.11180.
- ☑ Surface coating that meets the definition of “quality control activities” in §63.11180.
- ☑ Surface coating activities that are covered under another area source NESHAP.

Exempted Applications

- ☑ Spray applied protective oils for metal, bases, or acids (or a combination of these substances)
- ☑ Adhesives, sealants, maskants, or caulking materials
- ☑ Temporary protective coatings, lubricants, or surface preparation materials
- ☑ In-mold coatings spray applied in the manufacture of reinforced plastic composite parts.
- ☑ Coatings applied from a hand-held device with a paint cup capacity that is equal to or less than 3.0 fluid ounces.
- ☑ Surface coating application using powder coating, hand-held, nonrefillable aerosol containers, or nonatomizing application technology, including, but not limited to, paint brushes, rollers, hand wiping, flow coating, dip coating, electrodeposition coating, web coating, coil coating, touch-up markers, or marking pens.
- ☑ Thermal spray operations (also known as metalizing, flame spray, plasma arc spray, and electric arc spray, among other names).

WHAT IS EXEMPTED cont.

Facility Maintenance

Spray coating applications defined as facility maintenance are not subject to this rule. Examples of such facility maintenance are:

- Surface coating performed as part of the routine repair or renovation of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity.
- Surface coating associated with the installation of new equipment or structures, and the application of any surface coating as part of janitorial activities.
- Application of coatings to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curb.
- The refinishing of mobile equipment in the field or at the site where they are used in service and at which they are intended to remain indefinitely after refinishing. Such mobile equipment includes, but is not limited to, farm equipment and mining equipment for which it is not practical or feasible to move to a dedicated mobile equipment refinishing facility. Such mobile equipment also includes items such as fork trucks, that are used in a manufacturing facility and which are refinished in that same facility.

Not Included as Facility Maintenance

- Surface coating of motor vehicles, mobile equipment, or items that routinely leave and return to the facility, such as delivery trucks, rental equipment, or containers used to transport, deliver, distribute, or dispense commercial products to customers, such as compressed gas canisters. ***These activities must be considered for possible NESHAP applicability.***

If your facility or operation does not meet any of the exemptions listed above, please read the rest of this document to learn what you'll be required to do to comply with the area source NESHAP.

REQUIREMENTS

Spray Applied Coatings

This material is prepared to help facilities understand and comply with Subpart HHHHHH requirements. For specific requirements including the complete federal regulation, refer to: www.epa.gov/ttn/atw/area/arearules.html.

☑ All spray-applied coatings must use high-volume low-pressure (HVLP), air-assisted airless, airless, or electrostatic spray guns. An alternative may be used if the spray gun manufacturer demonstrates it has a transfer efficiency (TE) comparable to the spray guns listed above and written approval has been obtained from DNR or applicable county air quality program.

☑ Painters must be certified that they have received training on proper spray application, equipment setup and equipment maintenance. Minimal training includes:

- Hands-on and classroom instruction on spray gun equipment selection, set up and operation
- Training on spray techniques designed to improve transfer efficiency.
- Training on routine spray booth maintenance and filter selection, installation and maintenance.
- Surface coating of motor vehicles, mobile equipment, or items that routinely leave and return to the facility, such as delivery trucks, rental equipment, or containers used to transport, deliver, distribute, or dispense commercial products to customers, such as compressed gas canisters.

- Environmental compliance with respect to the Miscellaneous Surface Coating Operations Area Source NESHAP.

Compliance Dates

Existing Affected Sources

If your facility has been performing surface coating operations on or before September 17, 2007, your facility is considered an existing affected source and the ***compliance date is January 10, 2011.***

Painter training/certification must be completed within 180 days after hiring or no later than January 10, 2011, whichever is later.

New or Reconstructed Affected Source

If your facility began surface coating operations after September 17, 2007, it is considered a new or reconstructed affect source and the ***compliance date is the facility's initial startup date or January 8, 2008, whichever is later.***

Painters must be trained and certified within 180 days after hiring and no later than July 7, 2008, whichever is later.

REQUIREMENTS, cont.

Facilities may develop their own in-house training program which can be certified by the facility owner. All painting personnel must receive refresher training for recertification every five years.

☑ All spray areas must be fitted with a filter technology demonstrated to achieve a 98 percent capture efficiency of paint overspray. This requirement does not apply to waterwash spray booths that are operated and maintained according to the manufacturer's specifications.

☑ All spray-applied coatings must be applied in a spray booth, preparation station, or mobile enclosure.

- Spray booths and preparation stations used to refinish complete motor vehicles or mobile equipment must be fully enclosed with a full roof, four complete walls or complete side curtains, and be ventilated under negative pressure. However, fully enclosed spray booths equipped with door/opening seals and an automatic pressure balancing system may operate up to 0.05 inches water gauge positive pressure.

- Spray booths and preparation stations used for coating miscellaneous parts or vehicle subassemblies must have a full roof, at least three complete walls or complete side curtains, and must be ventilated so air is drawn into the booth. Booths may have opening for conveyors and parts that pass through the booth for finishing.

- Mobile ventilated enclosures used to perform spot repairs must enclose the surface around the area being coated so overspray is retained in the enclosure and directed to a filter (for overspray capture).

☑ All spray gun cleaning must be done so that an atomized mist or spray of cleaning solvent/residual paint is not created outside the container used for collecting the cleaning solvent/residual paint. Spray gun cleaning may be accomplished by hand cleaning, use of an enclosed gun wash unit, or by flushing equipment with solvent (provided the solvent is not atomized outside the container used for solvent collection).

Compliance Summary

- Use high efficiency spray guns
- Train and certify operators
- Enclose spraying areas
- Capture at least 98 percent of overspray
- Make sure cleaning methods capture paint and solvent.

REQUIREMENTS, cont.

Recordkeeping

Affected area sources must keep the following records to document compliance:

- ☑ Training certification records for painters. These records must include the initial training date and the most recent refresher training date for each painter, as well as the hire date of any painter hired after the source's compliance date.
- ☑ Filter efficiency documentation demonstrating that filters meet or exceed the 98 percent capture efficiency requirement.
- ☑ When the facility uses something other than HVLP, air-assisted airless, airless, or electrostatic application equipment, spray gun manufacturer documentation stating the spray gun has been determined by the Administrator to achieve a TE equivalent to an HVLP spray gun.
- ☑ Copies of any notifications and reports submitted to the Administrative Authority.
- ☑ Records of any deviation from the requirements and corrective action documentation.

Records should be maintained in a form suitable and readily available for expeditious review.

REQUIREMENTS, cont.

Iowa Air Construction Permits

The DNR issues air construction permits to ensure that facilities are meeting air quality requirements. Prior to initiating construction, installation, reconstruction or alteration of equipment, a permit is required unless a specific exemption applies [567 Iowa Administrative Code (IAC) 22.1].

Facilities that spray less than 3 gallons/day may use the DNR Permit by Rule (PBR) Notification Letter for all booths at the facility, provided they can certify exemption from, or compliance with, the miscellaneous surface coating NESHAP (Subpart HHHHHH). See the attached PBR notification form for eligibility requirements.

Facilities that spray 3 gallons/day or more are required to either obtain a construction permit for each booth or qualify for a specific exemption.

Facilities located within Polk or Linn counties must obtain the applicable air permits from their local air pollution control agency.



IOWA DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY BUREAU

**Subpart HHHHHH (6H) Initial Notification,
Notification of Compliance Status and
Petition for Exemption**

Miscellaneous Surface Coating Area Source Rule
40 Code of Federal Regulations (CFR) 63.11169 – 63.11180

1. **Facility Information:**

Facility Name:		Facility Number (if known):	
Facility Street Address:	City:	State:	Zip:
Owner's Name and Title:	Owner's phone number:	Owner's email (if available):	
Owner's Mailing Address (if different from facility street address):	City:	State:	Zip:

If the Operator information is different from above, please provide the following:

Operator's Name and Title:	Operator's phone number:	Operator's email (if available):	
Operator's Street Address (if different from facility street address):	City:	State:	Zip:

Is the source a motor vehicle or mobile equipment surface coating operation that repairs vehicles at the customer's location, rather than at a fixed location? Yes ☐ No ☐

2. **Identification of Standard:**

☐ Yes, I am subject to 40 CFR Part 63 Subpart 6H, National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources.

- An area source surface coating operation that coats metal and/or plastic products, motor vehicles, or mobile equipment is subject to Subpart 6H if the operation uses coatings that contain the Target HAP (lead, chromium, nickel, cadmium, manganese).
- An area source motor vehicle or mobile equipment surface coating operation that doesn't use the Target HAP is considered subject to Subpart 6H until an exemption request has been approved by the Administrator. This notification form may be used as an exemption request. **If your source is in this category, you may skip ahead to the "Responsible Official Certification" section.**
- An area source metal and/or plastic products surface coating operation that doesn't use the Target HAP is exempt from Subpart 6H. **If your source is in this category, you do not need to complete this notification.**

3. **A brief description of the type of operation:**

a. I have a:

- ☐ Motor Vehicle or Mobile Equipment Surface Coating Operation
- ☐ Miscellaneous Surface Coating Operation

b. Number of spray booths: _____

c. Number of preparation stations: _____

d. Number of painters usually employed: _____

4. **Compliance Status, please check one:**

For surface coating operations, the relevant requirements are specified in 40 CFR 63.11173(e) through (g) of this subpart. [The main compliance elements for this standards are: operator training (repeated every five years), HPLV or equivalent spray guns, enclosed spray area, 98% efficient filters, and enclosed spray gun cleaning.]

- ☐ This facility is already in compliance with each of the relevant requirements.
- ☐ This facility will be in compliance with each of the relevant requirements by the compliance date.
- New Source (after September 17, 2007 but before January 9, 2008): compliance date is January 9, 2008
 - New Source (after Jan 9, 2008): compliance date is date of startup
 - Existing source (before September 17, 2007): compliance date is January 10, 2011
- ☐ I plan to change operations at this facility prior to January 10, 2011, to avoid being subject to this rule.

5. **Certification of compliance status:**

- ☐ This facility is a new source (initial startup was on or after September 17, 2007). Startup Date: _____
- If the source is a new source, a responsible official must certify below that the source is in compliance with each of the relevant requirements of this subpart.
- ☐ This facility is an existing source (initial startup was before September 17, 2007). Startup Date: _____
- If the source is an existing source, a responsible official may certify below that the source is already in compliance with each of the relevant requirements of this subpart, or submit a separate certification no later than March 11, 2011, as specified in 40 CFR Section 63.11175(b).
 - ☐ I am certifying compliance below.
 - ☐ I will certify compliance by March 11, 2011, or provide certification that I'm no longer subject to the rule.

Responsible Official Certification (check all that apply)		
<input type="checkbox"/>	I certify the truth, accuracy, and completeness of this notification.	
<input type="checkbox"/>	The source is a motor vehicle and mobile equipment surface coating operation, but does not use the Target HAP. With this certification, the facility is requesting an exemption from Subpart 6H.	
<input type="checkbox"/>	The source has complied with all the relevant standards of this subpart. This initial notification also serves as the notification of compliance status.	
Responsible Official Name	Responsible Official Signature	Date

Submit this notification to the following agency(s):

- Iowa Department of Natural Resources, NESHAP Coordinator, 7900 Hickman, Suite 1, Urbandale, IA 50322
- If the facility is located in either Linn County or Polk County, this notification shall also be submitted to the appropriate county office:

Polk County Public Works
 Air Quality Division
 5885 NE 14th Street
 Des Moines, IA 50313

Linn County Public Health
 Air Quality Division
 501 13th Street NW
 Cedar Rapids, IA 52405

PERMIT BY RULE FOR SPRAY BOOTHS

Facilities located within Polk or Linn counties should contact their local air pollution control agency at:

Polk County Public Works
Air Quality Division
5885 NE 14th Street
Des Moines, IA 50313
Phone: 515-286-3351
www.airquality.co.polk.ia.us

Linn County Public Health
Air Quality Division
501 13th Street NW
Cedar Rapids, IA 52405
Phone 319 892-6000
www.air.linn.ia.us